FLORIDA PLANT IMMIGRANTS

OCCASIONAL PAPERS Nos. 11, 12, 13, 14 FAIRCHILD TROPICAL GARDEN

PACHIRA FASTUOSA
A TREE THAT IS FAMOUS FOR ITS SMELL
THE CANISTEL
THE TIGER GRASS

 $\mathcal{B}y$

DAVID FAIRCHILD

COCONUT GROVE, FLORIDA

Nos. 11, 12, 13, 14 - March 16, 1943



A Pink Flower of the Pachira held against the Green Bark of its Trunk. The strap-like petals roll backward and the countless long slender stamens stand out, separated one from the other. The pistil is shown on the right, its star shaped stigma unfortunately was cut off by the edge of the plate. It is longer and thicker than the stamens and any bat visiting the flower could hardly fail to brush against it and carry pollen to the next flower it visited. The flower is fully open about nine in the evening and its stigma is then receptive for pollination.

PACHIRA FASTUOSA

 $\mathcal{B}y$

DAVID FAIRCHILD

MANY strangers stop each year at "The Kampong" gate to ask what the striking tree is which stands close to it and is covered with beautiful deep, rose pink flowers resembling giant shaving brushes. So many do this that I have almost felt it was something of a nuisance, yet there are so few trees of this species in the region that I feel I should tell about it or else give the tree away to someone who will.

I must admit it is a handsome tree when in flower and an interesting one all the year through. It is a native of the American tropics and one of four species, which are interesting from one angle or another. It was named Pachira by the French botanist Aublet who was born in 1720 in Provence. He is known for his "History of the Plants of French Guiana" which he wrote after some years sojourn in that country.

The whole look of the tree is unusual, I might almost call it modernistic. Long before my tree bloomed I was attracted to it by the beautiful trunk which does not seem to be but is, of course, covered, as is that of all trees, by a solid coating of bark. There are portions that have a thin layer of greyish cork but for the most part you can lay your palm down on a cool, green surface which is smooth as is the fresh new growth of ordinary trees.

Its mode of branching is interesting and unusual. Many trees produce a mass of branches, many of which they shed later, but the pachira sends out a definite few and these are, almost from the start, rather large and stand out from the trunk at a broad angle. It is never solidly covered with foliage, but the leaves are large and handsome. A long stem or petiole, sometimes two feet long, bears at its end five leaflets spread out like the fingers of ones hand, in this respect

resembling the well known horse chestnut leaves but more leathery in texture. When they come out in late spring the wine red young leaves are beautiful with the pale green of the trunk; almost as beautiful as the flowers.

In Coconut Grove the leaves begin to drop with the approach of cool weather and by Christmas time the tree is bare. Then its green bark shows up plainly, giving the tree a fresh alive appearance reminding me of the Moose Wood maple of our Northern forests. Soon the picturesque flower buds begin to form. They resemble giant acorns set in their cups and are borne on thick, short stems. For sometime they grow slowly and no change in their appearance is noticeable, then with the approach of spring, in March, they enlarge rapidly and suddenly. Almost over night out of the cup the acorn elongates into a columnar bud as long as ones finger. This flower bud usually points straight upwards and is composed of five brown, strap shaped petals stuck together. Watch them closely and you will notice some evening that they burst open, the long petals curling back, revealing a bundle of rose pink stamens three inches long, each stamen tipped with its golden anther, loaded with pollen. The next morning these long, rose colored stamens are standing free from the flower in a mass that resembles more than anything else (much as I hate to draw the simile) a shaving brush. Looking closely the pistil can be seen, for it is white and protrudes beyond the pink stamens and has an irregular, star shaped stigma.

These extraordinary flowers do not all open at once but one by one over a period of several weeks. Unlike many flowers whose petals make the show the beauty of the pachira depends upon the bright rose color of the hundreds of stamens. For a long time I wondered what insects there were in the tropics of South America which could pollinate these flowers, and imagined some Sphinx moth with its extremely long probosis might satisfy its thirst for the nectar which collects in the flower cup at the base of the stamens and by brushing against the anthers, carry the pollen on its breast to some other waiting pistil on some other tree. No fruits have ever set on my tree so I assumed that it required cross fertilization to make it bear and as there were no other pachira trees near by the chances of getting fruits from it seemed remote.

Last spring Dr. Merrill of the Arnold Arboretum visited me and one morning as we were looking at the tree in full flower he remarked that in the Philippines, where some of these pachira trees have been growing, the bats visit them and he thought that they accomplished the act of cross pollination.

This statement led me to make a visit to Mrs. Simpson's at Little River, as I remembered Professor Simpson had planted a tree which flowered every year. It was in bloom, so I gathered some of the flower buds and took them to "The Kampong" thinking to apply the pollen from them to my flowers the following morning. Some trivial matter intervened and before I got around to the task the flowers had faded. I later got other flowers and did some cross pollinating with them early one morning but quite without results. No fruits set.

Luckily there was someone else watching a pachira tree. Mrs. Elsie Picot an old friend of Professor Simpson's, took some unopened flower buds from Mrs. Simpson's tree one evening last spring and put them in a vase on her table. To her amazement and that of her son, about nine o'clock at night they began to open, spreading out their petals with a rush, even making a slight noise as they popped open. By half past nine the flowers were fully open and the pollen in shape to be carried by bats or moths or any night flying creatures.

Mrs. Picot had discovered the proper time for pollinating the pachira,—it is early in the night, not early in the morning. She telephoned me her discovery; fortunately in time for me to take flowers from my tree down to Colonel Montgomery's young trees that same evening.

By a curious coincidence, Dr. Merrill who had suggested the bat idea and Dr. Swingle the great plant hybridizer were both at the Colonel's house. I dragged the whole party out to the pachira trees in the garden and by the light of their flash lights the two botanists pollinated all the flowers then open. From this, the first attempt under correct circumstances to cross pollinate the pachira in Florida, only one fruit set. Unfortunately the season turned extremely dry and this single pod, after attaining a quarter of its normal size, dropped off. The proceedure has, at last been found by means of which we shall be able to get our pachiras to seed and so make available to the public more of these spectacular flowering trees. In fact, Mr. Jordahn has raised a hundred or so plants from a cross pollination he performed the following year.

There is a further reason for wishing to learn how to make the various species of pachira fruit. I found this out in an amusing way. While with Mr. Allison Armour on his yacht off the coast of West Africa at Konakry in French Guinea the party of Botanists made a rather strenuous trip into the Fouta Djallon mountains. When we returned to the yacht, Mr. Armour handed me a curious pod that was filled with large seeds. "I didn't have to go exploring in the mountains to find interesting things," he remarked. A visitor to the yacht had, during our hunt in the interior, brought him this pod. "It is the Noix de Cayenne and it is very good to eat," the visitor had explained. It's name indicated that it came from South America, but it took me some time to discover that it is the fruit of a pachira related to the same tree which I had growing on my place in Florida, Pachira fastuosa. We ate the seeds, some of them, and found them as good as hazel nuts. For one reason or another I have never since that time been successful in getting any more of the Noix de Cayenne to eat or to plant.

In South Florida we now have both the rose pink variety and one with pure white stamens, but just where the white sport originated I have not discovered. It has a delicate etherial beauty of its own.

Another species of the same genus, probably Pachira insignis, with less attractive flowers, has been growing in Coconut Grove for many years; I have watched with interest it's struggle to survive. It is growing on the bare rock and seems never to have been given any especial attention. It's branches have been whipped off by every heavy storm which has swept the coast but it's large, buttress-like roots have held it firmly anchored and every time I pass it I admire it's deep green foliage and the grace of its buttresses. To many people it is a "silk cotton" tree but it is only a distant relative.

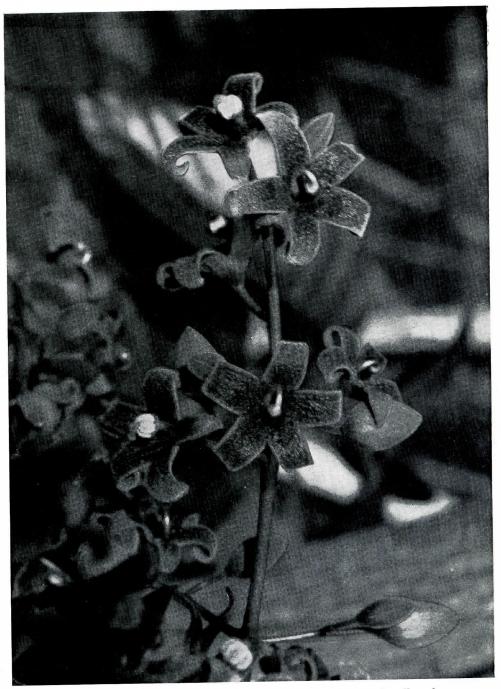
It is not deciduous like my tree and it's blooms appearing while the leaves are on the tree, are not easily seen. They are similar in structure but have fewer stamens and these are longer and of an inconspicuous greenish white. The inside of the petals are reddish. It has never fruited but I suspect it is the Noix de Cayenne.

I once had the pleasure of seeing another of the pachiras, P. aquatica. It was in one of the charming valleys of Trinidad, where Dr. Cheeseman of the Imperial Agricultural College took me one morning. Under a tall forest tree, lying in the wet grass and leaves on the hillside I saw about a dozen of its pods. As Dr. Cheeseman picked one up and held it for me to photograph, I thought it much like a boy's Rugby football.

The sutures that separated the valves of the pod, for it is not a fruit in the ordinary sense, were like the seams on the football. It's surface was as soft as plush, covered with silky hairs. Inside were rows of seed as large as hickory nuts. When roasted they are good to eat, but I never heard that they are gathered in any commercial quantity in Trinidad. It's flowers are borne while the trees are in leaf, but though immense they are not very showy.

According to that marvellous repository of botanical knowledge, Lindley's "Treasury of Botany," published in 1873, there is one species *P. alba* in "New Grenada," (Colombia) the inner bark of the trees of which furnishes the entire country with cordage and another *P. macrantha*, in Brazil, which grows to be a hundred feet tall and has flowers fifteen inches long with petals that are pale olive green within and stamens that are blood red with yellow anthers.

Perhaps some day some traveller to South America will take the trouble to make a study of the Pachiras and assemble in South Florida all the interesting forms.



It seems incredible that flowers so beautiful, chocolate brown edged with yellow, large masses of them, could emit such a strong odor as do these flowers of the Sterculia foetida. I never look at this photograph without recalling the feeling of nausea that came over me as I stood taking it with the black focussing cloth over my head.

A TREE THAT IS FAMOUS FOR ITS SMELL

 $\mathcal{B}y$

DAVID FAIRCHILD

TREES can be famous for many reasons; they may be immense like the Sequoia or the Eucalyptus or very beautiful when in bloom, like the Poinciana and the Jacaranda. If one has a personal history, as has the Hooker Oak of California, or if perchance some noted human being has become associated with it like the Washington Elm of Cambridge, or if it should happen to be the last specimen in existence, like the last wild Kokia tree in Hawaii, or if perchance, like the sausage tree, its fruits have a resemblance to something which everybody knows does not grow on a tree, the general public will make a beaten track to it's particular door.

What if a tree should be noted for the vile odor of its flowers? Will people flock to see it even if they have to hold their noses? I believe they will. Not, perhaps, because of its stench, but in spite of it, for curiously enough many trees or plants which stink possess other characters which attract man to them.

Think of the skunk cabbage of our American forests; it is one of our most curious plants. The common rue of European and American gardens has a vile odor yet it yields the French perfume "Vinagre des Quatre Volers" and forms an ingredient of herb salads in Italy.

One of the most famous of all the fruit trees of the world is the durian whose fruits have such a penetrating, nauseating odor that no hotel keeper in Malaya will permit a coolie carrying one to step on the verandah for fear of offending his guests. Yet so delicious is the fruit flesh itself that murders are committed over the ownership of the wild trees.

The amazing Rafflesia flower when fully open has a stench that is almost overpowering, but a single flower that is three feet across, has no stem or leaves and is borne a parasite on the root of a grape vine, will attract the public, smell or no smell. Were it on exhibition in the New

York Botanic Garden great crowds would hold their noses and go to see it, as they did when the giant Sumatran Amorphophallus titanum bloomed there last year.

And so, remembering these facts, I venture to present this brief account of a tropical tree which is already growing and flowering on the streets of Miami, a tree which is worthy the admiration it is receiving although it has in my opinion the vilest smelling flowers that I know.

It was in 1921 during a brief stay on the Isthmus of Panama that I first saw this tree. (Sterculia foetida). It stood at the end of one of the streets in the residential portion of Balboa Heights, and was so handsome that I asked about it and was met with the statement that a round robin had recently been penned to the Governor of the Zone protesting against that very specimen and asking for it's removal because when it flowered those living on the street were annoyed by its fetid, nauseating odor. It was not then in flower so I could not smell it for myself.

The following year during a visit to our little Plant Introduction Garden, I noticed a flowering tree that Mr. Simmonds had planted in the public parkway opposite the entrance. Its handsome chocolate brown flower clusters marked with yellow were very striking and I wondered which one of our New Introductions it might be. A friend who was with me was in a hurry to get home, so I did not stop to identify it, but put a cluster in the back of my car and drove off towards Coconut Grove. As we went along I gradually became conscious of a very offensive odor. I knew that sometimes Mr. Simmonds used night soil around the garden and I had a horrible fear that perhaps he had not buried some of it deeply enough, so on reaching my friend's house I made some excuse and disappeared behind the house to inspect my shoes. They were perfectly clean and I noticed no smell. After a brief visit

in the house I returned to the car and started to drive home. The stench returned in full force. Finally I bethought myself of the flowering branch in the back of the car and smelled of it;
—it was terrible!

In spite of this, I could not resist taking a photograph of the flower cluster when I got home. The flowers were wierdly beautiful, fascinatingly formed and colored. It took me sometime to arrange the natural size photograph, reproduced here, showing the strange curved pistil with its surrounding ring of stamens and, as the sunlight poured down on the open flowers an intense nausea almost overcame me. It was all I could do to keep my head under the black cloth until the picture was arranged and the shutter snapped. Then I threw the branch away as far as I could behind the barn.

Not long after this experieice I happened to be in Cuba, visiting the Harvard Arboretum at Soledad near Cienfuegos. Mrs. Atkins was there and she called my attention to a fine specimen of this tree which Mr. Hughes, the manager of her sugar estate, had planted in front of the office not more than a hundred paces from the front of the "Vivienda," or plantation house, where for many years Mr. and Mrs. Atkins had lived. "When that tree flowers" said she, "the smell of its blossoms is so bad that we can scarcely stand it in the house, but I can't get Mr. Hughes to cut it down. It has grown into such a fine stately tree that he cannot bare to destroy it."

Mr. Simmonds felt the same way, and so although I warned him that he would have trouble if he let this vile smelling tree stay there in the parkway of Brickell Avenue, it was never removed, and is standing there still. Passing swiftly under it in my automobile last spring I caught a gentle whiff of its "perfume."

Perhaps if the flowers were the only beautiful feature of this famous tree they might not be enough to save it, but its large pods are among the most decorative and showy things produced by any plant. They are deep scarlet on the outside and when they open, like immense pea pods, handsome chocolate brown beans can be seen lying in rows against the background of soft yellow fuzz. My old friend Charles Mosier, whose boyish delight in some new find was always refreshing to observe, once brought me a pod feeling that he was giving me one of the richest and

most charming things he had ever found, and I agreed with him for nothing could be more stunning than the seed pod of the Sterculia foetida, unless it be the pod of one or other of it's cousins, such as Sterculia tragacantha which I once had the pleasure of collecting back of Konakry on the coast of French Guinea. I could see its brilliant scarlet pods for a hundred yards and I am impatient for its seedlings to flower and fruit.

Last winter at the Miami Biltmore Flower Show a lady approached me in great excitement saying there was a very beautiful seed pod in one of the exhibits which had no label and she admired it so much that she simply must know it's name; could I perhaps identify it for her. I walked over with her and at once recognized Sterculia foetida, then glancing around I saw in a near by exhibit a spray of flowers of the same species. Taking her by the arm I led her over to it and begged her to note its fragrance. The effect of the whiff of perfume was startling, so much so that I could not understand how the flowers had come to be put in the show. Strangely enough, no one had noticed the smell. Apparently it did not extend very far from the flower cluster, I don't know why, unless perhaps it had lost some of its potency because the branch had been cut and kept in a vase.

The attention which the flowers and pod received during the remainder of the Flower Show confirmed me in my belief that the incredible stench was actually an "attraction," certainly it was to those who were curiosity seekers.

There are a hundred or so species of this genus in the tropics of Asia and Africa, but so far as I know only three have found their way into our parks in South Florida. Sterculia carthaginensis was introduced quite early and has grown into a fine specimen on the street in front of the Brickell Avenue Garden, its immense palmate leaves making it a showy thing. It never fruited however, probably requiring a mate, for, like some of the other species it is dioecious, having male and female flowers on different trees. This and the two others mentioned are scarcely enough to indicate what the genus would do were it once really exploited by our horticulturists.

But the Sterculia foetida is the most renowned of them all because its perfume once smelled can never be forgotten.



A bowl of Canistels fresh from the tree in December. Only a color print or a painting could do justice to the golden yellow, both inside and out, of these mid-winter fruits. As they ripen they drop to the ground and open up in an inviting way. Their texture is surprising and while some do not care for them at first, many grow very fond of them and eat them out of hand or in salads or with sugar and cream.

THE CANISTEL

A Winter Fruit in South Florida

 $\mathcal{B}y$

DAVID FAIRCHILD

THE question of how well you like a fruit is important when it comes to deciding whether or not to plant the trees which bear it. If a new fruit is given you to taste, you never think of asking if it is a good sample of its kind. You take for granted, every time, that it is. It may be, but the reverse may be true too!

These two facts have much impressed me lately in regard to the trees of the Canistel or Ti-es, (Lucuma nervosa) which I have on "The Kampong" and which I look forward to seeing again when I return to Florida each autumn. For I like my canistels, although I do not like canistels in general.

It was in 1916, I think, that I went with Charles Deering to see the new hammock land he had bought on the Cutler road. He picked a fruit from one of the trees in the old overgrown plantation and gave it to me with a smile saying: "I like this damn thing. It isn't much good but I like it." It was a cream colored fruit about the size of a large lemon with a mealy yellow fruit flesh which crumbled in my mouth much as the yolk of a hard boiled egg does. I found it curiously interesting and ate it with a mild degree of enjoyment, pocketed the seed and later planted it on the place in Coconut Grove which we had just bought.

That seed started my little planting of the Canistel and curiously enough it produced a seedling with fruit much like the one Mr. Deering gave me.

From time to time I planted other trees from seeds collected here and there which I grew in my slat house until now I have a half dozen fruiting seedling trees. They all bear quite different fruits, both as to flavor and shape; no two

being alike. The Deering tree, leads all the others in size and mealiness of its fruits, and when my guests arrive in December it is to this tree that I prefer to take them for I am more likely to get a favorable reaction than if I attempt to introduce them to any of the other seedling varieties. It must be admitted that the canistel is so different from any other fruit that a Northerner has ever tasted that he is apt to be overcome by surprise and often decides, almost before he gets it into his mouth, that he does not like it. He cannot say that he does not like the looks of it for when broken open it is a pleasant golden yellow color. Perhaps he has a right to expect that a substance so closely resembling in color and texture the yolk of a hard boiled egg should taste like one, but it doesn't; it is sweet, quite sweet, and who ever heard of a sweet hard boiled egg?

Yet for all this there are some, yes a good many, of my friends who like the canistel either from the very first or after a number of trials, and there are not a few who rave over it and use it in a variety of ways; in salad or as a mousse, or in ice cream. To me it is primarily as a fruit to eat out of hand that it is most acceptable.

A few visitors have come into my place who could hardly bear the sight of a canistel and could not understand how anyone could abide its taste. Until this winter I was somewhat at a loss to explain so violent an antipathy towards so harmless a fruit. With the acquisition by my brother-in-law, Dr. Gilbert Grosvenor, of the place next door to "The Kampong" I had the opportunity to make the intimate acquaintence of its fruit trees, many of them planted a long time ago. I was pleased to find a large canistel tree and praised it up to Dr. Grosvenor and

his whole family. As it began to fruit, unfavorable reflections of its quality began to drift in upon me from various members of the family, which I put down to a natural and forgiveable conservatism. "But it smells so," one of the children remarked so I went over to investigate, for what faint odor my fruits have is a pleasant one. To my surprise, and quite to my disgust, the fruit actually stank. Those over ripe ones which had fallen and were rotting on the ground were highly offensive and even the properly ripened ones still hanging on the tree had an odor that was distinctly disagreeable.

At last I understood why so many old residents spoke of the canistel with scorn and why so few had taken the trouble to grow it in their yards.

Here was an illustration, and a graphic one, of the difference in quality of the fruit produced by different seedling trees. I am aware that my Northern horticultural friends will smile and say that of course this was to be expected. As many of them have visted my trees, tasted the fruits and never once raised the question of whether there might not be better flavored seedlings, I tell of this incident because it brings out a point which I wish to emphasize, namely that with few exceptions the fruits of the Tropics have none of them been subjected to any selection comparable to that to which the apple or pear or cherry or any of our north temperate fruits have been subjected. They are nearly all of them still in a wild state and fully as promising for improvement as were the wild apples of the temperate zone.

Looking my half dozen trees over I find that one of them has long narrow fruits inclined to be rather moist inside when ripe, another has perfectly round fruits but they are all quite small, another has fruits so large and of such good flavor that they deserve to be given a special place on the table. Their time of ripening varies too. A round variety comes in November, another in December, still another has fruits that hang on until April when all the others have gone. They exhibit in other words, those variations which a plant breeder such as Burbank would have singled out immediately. Instead of being satisfied

with a few trees he would have planted thousands of seeds in seedbeds and trusting to his "instinct" for selecting what he used to call "tame looking" seedlings he would have brought them into fruit quickly by his process of grafting the seedlings onto bearing trees.

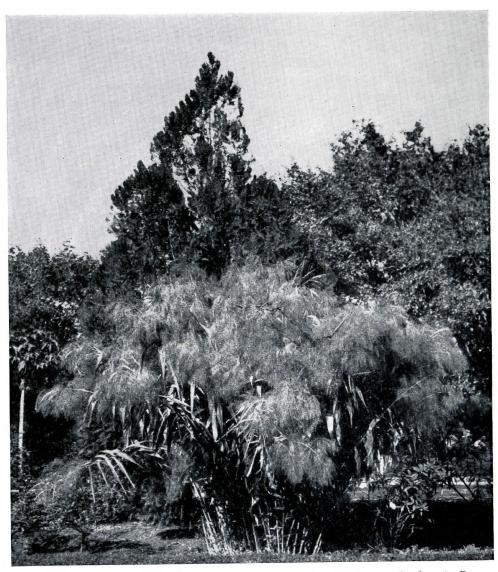
He would first have to find out if the canistel could be grafted or budded. I am glad to be able to say that this can be done, for last year I made some grafts on a lot of seedlings growing in my yard. The method was the simple cleft graft and the time of the year was spring when the seedlings were in especially rapid growth.

When in Haiti in 1932 I discovered, in the yard of the American Legation a tree of quite another species of the genus to which the canistel belongs. It was the Lucuma domingensis. Its fruits were somewhat flattened in shape and of a firmer consistency but the flavor was poor, in fact they were scarcely edible.

There was growing at Chapman Field another species of Canistel (L. serpentaria). It would be interesting to make a hybrid between it and my canistel so I brought a tree into my collection and when it fruited two years ago I cross pollinated them. I have now two little plants with characters intermediate between the two parents. One of them shows unusual vigor, but what good it will be or whether it will have any use at all depends upon many things.

This hybrid does at least indicate that there is a possibility of welding together the various species of Lucumas into something different from anything we have had before. When we recall that the orange is probably a hybrid, that the large fruited strawberry surely is one, that hybrid apples have been produced and that Swingle has made hybrids between the orange and the grape fruit, the Tangelos, is it too fantastic to dream that someday the canistel or its hybrid descendents may fill the winter markets with a new and much appreciated tropical fruit?

There are fifty species of lucumas in the American tropics, and no one yet knows them with that degree of intimacy which is necessary before they can be bred intelligently.



The Tiger Grass (Thysanolaena agrostis) as I first saw it in the Empress Gardens in Poona, India one early morning in January, 1902. "It remains in bloom for four months" said Mr. Kanetkar, Superintendent of the Gardens. From this clump came the rhizone cuttings which have supplied Florida with clumps of this beautiful flowering grass.

THE TIGER GRASS

Thysanolaena agrostis, Nees

 $\mathcal{B}y$

DAVID FAIRCHILD

I T WAS in the Empress Gardens at Poona, India, that I first saw this superbly ornamental grass. As the sunlight shone through its panicles of delicate flowers, they looked like puffs of smoke and I fell in love with it on sight. Kannetkar, the Gardner, in his elaborate turban, his forehead dotted with the mark of his caste, had taken me to see it. He too seemed peculiarly fond of it.

I begged seeds but there were none so I dug a rhizome from one of the clumps, cut it in two, and packing it with unusual care sent it to Washington. The cuttings arrived safely on February 25th, 1902 and were given the S.P.I. number 8445 and a description was published in the Inventory.

I knew that plants had been propagated successfully from these pieces of rhizome and some of them given away but as the years passed and I did not see it anywhere in Florida, where it should have grown well, I became convinced that it had been lost. Some years later Harold Hume took me to see the great plantsman Theodore L. Meade and his amyrillus and orchids at Oviedo. As he showed me about, suddenly I saw a small specimen of my beloved grass growing in a sheltered spot in the hammock. I was delighted to see it again, and as by this time I had a place of my own where it would grow, Mr. Meade gave me a piece of it to try, and it has become one of our treasured possessions.

Its broad, thin, dark green leaves, each with a fold across it, its straight stems rising sometimes ten feet in height and its long panicles of smokegrey flowers, make it unlike any other grass in cultivation. The name Thysanolaena is derived from the Greek, thusanos, fringed and laina,

mantle indicating that the delicate fruiting glume which serves as a mantle for the flower is fringed with hairs.

Although the small clump which Mr. Meade gave me grew into a large one from which I have propagated and given liberally to my friends, it has spread very slowly in South Florida. It does not seem to have been sold by nurserymen or distributed by the government to any extent. The fact that it does not seed may explain this although the species is easily propagated from rhizomes and many people should have had a chance to grow it in their yards.

I had thought of this species as the only one of the genus (Willis so gives it) and associated it with British India. I was therefore much surprised one morning as Marian and I were motoring along a mountain road in North Sumatra to see along the bank everywhere the familiar, smoke-like panicles of this very grass. It was a tiger infested region in which we were at the time, but unfortunately I had not then heard the grass called the Tiger Grass, in fact not until I sat down here to write this account had I ever seen the name printed, so we missed the thrill of looking at tiger grass and hearing tigers roar at the same time.

After our return from Sumatra I learned that the grass in the Atchinese highlands is a distinct species, Thysanolaena maxima. In my place in Florida it has refused to perform in the spectaculaar way of the grass from India; I once saw it behaving well in the greenhouse of the New York Botanic Garden, however.

It was not until 1930 that I met anyone who cared for the Tiger Grass as I do. I was on the Morne Bruce in the island of Dominica, calling

on Mr. Joseph Jones, the retired director of the beautiful Botanic Garden of the island. He took me to see a beautiful clump of it near his house and it is a pleasure to be able to look at the photograph which I took of him there in the sunlight admiring his tiger grass.

For Mr. Jones should always be remembered in South Florida for his gift to us of a very beautiful spring-flowering tree, Sabinea carinalis, which, before its leaves come out in the spring, covers its branches with lovely red flowers comparable in their beauty with the Red Bud of temperate regions but more vivid.

I never thought of the Tiger Grass as being more than an ornamental plant in the garden until 1939 when to my great surprise I found for sale in the markets of Manila, charming decorative little brooms made by binding bunches of the dried flower-stems together in such a way as to spread them out in the shape of a fan. These brooms or dusters are admirably suited for sweeping polished floors and for use around the hearth. We brought back several of them and one is to be seen in the Montgomery Museum of the Fairchild Garden, devoted to Palm products.